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EXAMINER

BLACKMAN, ANTHONY J

ART UNIT PAPER NUMBER

2672

DATE MAILED: 02/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/408,716**

Applicant(s)  
**SAFFER et al**

Examiner  
**Anthony Blackman**

Art Unit  
**2672**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 27, 1999
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other:

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

1. Claim rejected under 35 U.S.C. 102(e) as being anticipated by MARTZ US Patent Number 5,986,673.
  2. Consider claim 1. MARTZ discloses a method of relationally ordering object (record) attributes provided for data display and analysis of information in two and three dimensional formats teach interactive display of cluster analysis (abstract, lines 1-3 column 1, lines 19-20, figure 7, column 6, lines 33-34 and 45-53);  
defining a set of graphic images, wherein each graphic image represents a range of values (column 2, lines 49-66, column 3, lines 16-43, column 10, line 55 to column 11, line 10);  
generating a first surface map with <sup>figure</sup> (1) graphic images, representing attributes associated with the records (figure 1), arranged along a first dimension (figure 1, column 2, lines 49-66), and <sup>figure</sup> (2) records, represented by a collection of graphic images, arranged along a second dimension (column 2, lines 49-66, figure 1(MARTZ)) illustrates a first and second dimensional surface map that is equivalent to figure 4 of the instant application);
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receiving input from a user selecting a record from the first surface map (figure 8, column 10, line 55 to column 11, line 10);

and altering a visual representation of the record in another view (figure 4, column 6, lines 54-61).

3. Consider claim 2. MARTZ discloses the method of claim 1, wherein the graphic images are color-coded blocks (column 3, lines 26-43, column 7, lines 11-13, and observe figures 3, 5-7, and 9-10).

4. Consider claim 3. The method of claim 1, wherein the records are ordered into groups (column 1, lines 5-11, 48-51).

5. Consider claim 4. The method of claim 1, wherein the records are ordered into groups (column 1, lines 5-11, 48-51, column 2, lines 49-66).

6. Consider claim 5. The method of claim 4 where the groups are ordered based on statistical correlation (figures 1-2, and column 1, line 19-47).

7. Consider claim 6. The method of claim 1, wherein the order of the display of the attributes associated with the records is based on statistical correlation (figures 1-2, and column 1, line 19-47).

8. Consider claim 7. The method of claim 1, wherein the order of the display of the attributes associated with the records is based on cluster analysis ((figures 1-2, and column 1, line 19-47).

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9. Consider claim 9. The method of claim 1 further comprising generating a dendogram to indicate relationships between records (column 1, lines 48-51).

10. Consider claim 12. MARTZ discloses a method of relationally ordering object (record) attributes provided for data display and analysis of information in two and three dimensional formats teach interactive display of cluster analysis (abstract, lines 1-3 column 1, lines 19-20, figure 7, column 6, lines 33-34 and 45-53);  
providing a surface map representing a set of records (figure 8, column 10, line 55 to column 11, line 10);  
linking the surface map to a set of views (figure 8, column 10, line 55 to column 11, line 10);  
receiving an input signal [from the cursor] selecting a portion of the surface map (figure 8, column 10, line 55 to column 11, line 10);  
and indicating, in a view linked to the surface map, at least one of the records corresponding to the selected portion (figure 8, column 10, line 55 to column 11, line 10).

11. Consider claim 15. MARTZ discloses a method of relationally ordering object (record) attributes provided for data display and analysis of information in two and three dimensional formats teach interactive display of cluster analysis (abstract, lines 1-3 column 1, lines 19-20, figure 7, column 6, lines 33-34 and 45-53);  
selecting a set of records and heir associated attributes, wherein the associated are any combination of numeric, categoric, sequence, and text information (figure 8, column 10, line 55 to column 11, line 10);

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converting the associated values into numeric values (figure 8, column 10, line 55 to column 11, line 10);

defining a set of graphic images, wherein each graphic image represents a range of numeric values (figures 3, and 5-8);

generating a surface map with the set of records arranged along a first dimension and graphic images, representing attributes associated with the records, arranged along a second dimension (figures 3, and 5-8).

12. MARTZ discloses a method of relationally ordering object (record) attributes provided for data display and analysis of information in two and three dimensional formats teach interactive display of cluster analysis (abstract, lines 1-3 column 1, lines 19-20, figure 7, column 6, lines 33-34 and 45-53);

selecting a set of records and heir associated attributes, wherein the associated are any combination of numeric, categoric, sequence, and text information (figure 8, column 10, line 55 to column 11, line 10);

converting the associated values into numeric values (figure 8, column 10, line 55 to column 11, line 10);

defining a set of graphic images, wherein each graphic image represents a range of numeric values (figures 3, and 5-8);

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generating a surface map with the set of records arranged along a first dimension and graphic images, representing attributes associated with the records, arranged along a second dimension (figures 3, and 5-8).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over MARTZ US PATENT NUMBER 5,986,673 in view of CAID et al US PATENT NO. 5,619,709.

15. Consider claim 8. The method of claim 1, further comprising analyzing an index to determine if the record is shown in another view. MARTZ does not expressly teach limitations of claim 8. However, CAID et al teach the limitation (column 12, lines 39-67). It would have been obvious to one at the time of the invention to utilize the index of the context vector of CAID et al's system and method of context vector generation and retrieval with cluster analysis process of MARTZ because context vectors and cluster analysis share similar technological environments and teachings. For example, CAID et al teach that context vectors represent relationships among information items...".

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16. Consider claim 10. The method of claim 1, further comprising: determining a text-based identification of the record represented in the selected portion of the first surface map. MARTZ meets Claim 1 limitations, however, does not expressly teach the limitations of claim 10. CAID et al teach the aforementioned limitation (figures 8-9c).

17. Consider claim 11. The method of claim 1, further comprising: generating a second surface map, wherein the second surface map is a reduced-sized view that corresponds to the first surface map and that shows all records and graphics images representing associated attributes; highlighting on the second surface map the records currently being shown on the first surface map. MARTZ meets Claim 1 limitations, however, does not expressly teach the limitations of claim 11. CAID et al teach the aforementioned limitation (figures 8-9c); highlighting on the second surface map the records currently being shown on the first surface map (column 24, lines 31-60).

18. Consider claim 13. MARTZ discloses a method of relationally ordering object (record) attributes provided for data display and analysis of information in two and three dimensional formats teach interactive display of cluster analysis (abstract, lines 1-3 column 1, lines 19-20, figure 7, column 6, lines 33-34 and 45-53);  
defining a set of graphic images, wherein each graphic image represents a range of values (column 2, lines 49-66, column 3, lines 16-43, column 10, line 55 to column 11, line 10);  
generating a three-dimensional surface map with (1) records arranged along a first dimension (figure 1, column 2, lines 49-66), and (2) records, represented by a collection of graphic images,

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arranged along a second dimension (column 2, lines 49-66, figure 1(MARTZ) illustrates a first and second dimensional surface map that is equivalent to figure 4 of the instant application), and (3) the values associated with the attributes arranged along a third dimension (figures 8-9, column 10, line 55 to column 11, line 10);

receiving input from a user selecting a record on the surface map (figure 8, column 10, line 55 to column 11, line 10) ;

altering the visual representation of the record in the other view based on the input, when the record is shown in another view (figure 4, column 6, lines 54-61), however, MARTZ does not expressly teach analyzing an index to determine if the record is shown in another view.

CAID et al teach analyzing an index to determine if the record is shown in another view (column 12, lines 39-67.

19. Consider claim 14. The method of claim 13, wherein the three-dimensional surface map may be rotated in any of the three directions. MARTZ meets teaches rotation of all three dimensions (column 6, lines 8-13).

20. Consider claim 16. MARTZ discloses a method of relationally ordering object (record) attributes provided for data display and analysis of information in two and three dimensional formats teach interactive display of cluster analysis (abstract, lines 1-3 column 1, lines 19-20, figure 7, column 6, lines 33-34 and 45-53);

generating a first surface map with (1) records arranged along a first dimension and graphic images (figure 1, column 2, lines 49-66), representing attributes associated with the records,

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arranged along a second dimension (column 2, lines 49-66, figure 1(MARTZ) illustrates a first and second dimensional surface map that is equivalent to figure 4 of the instant application); receiving input from a user selecting a record on the surface map (figure 8, column 10, line 55 to column 11, line 10) ;

altering the visual representation of the record in the other view based on the input, when the record is shown in another view (figure 4, column 6, lines 54-61), however, MARTZ does not expressly teach at least one memory having program instructions , and at least one processor configured to execute the program instructions to perform the operations of :

defining a set of graphic images, wherein each graphic image represents a range of values; analyzing an index to determine if the record is shown in another view;

CAID et al teach at least one memory having program instructions (figure 1A) , and at least one processor (1A) configured to execute the program instructions to perform the operations of :

defining a set of graphic images, wherein each graphic image represents a range of values (figures 5-6); analyzing an index to determine if the record is shown in another view (column 12, lines 39-67).

21. Consider claim 17. MARTZ discloses a method of relationally ordering object (record) attributes provided for data display and analysis of information in two and three dimensional formats teach interactive display of cluster analysis (abstract, lines 1-3 column 1, lines 19-20, figure 7, column 6, lines 33-34 and 45-53);

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defining the means of a set of graphic images, wherein each graphic image represents a range of values (column 2, lines 49-66, column 3, lines 16-43, column 10, line 55 to column 11, line 10); means for generating a [first] surface map with (1) records arranged along a first dimension and graphic images, representing attributes associated with records, arranged along a second dimension (figure 1, column 2, lines 49-66); means for receiving input from a user selecting a record on the surface map (figure 8, column 10, lines 55 to column 6, line 10); means for altering the visual representation of the record in the other view based on the input, when the record is shown in another view (figure 4, column 6, lines 54-61); however, does not expressly teach analyzing an index to determine if the record is shown in another view. CAID et al teach the means for analyzing an index to determine if the record is shown in another view (column 12, lines 39-67).

22. Consider claim 18. MARTZ discloses a method of relationally ordering object (record) attributes provided for data display and analysis of information in two and three dimensional formats teach interactive display of cluster analysis (abstract, lines 1-3 column 1, lines 19-20, figure 7, column 6, lines 33-34 and 45-53);

### ***Conclusion***

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23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. HOFFMAN, US PATENT NUMBER 6,035,057. LINDHOLM, US PATENT NUMBER 5,592,599. JAIN et al US PATENT NUMBER 6,121,969. KRAMER et al, US PATENT NUMBER 6,327,574. HAZELHURST et al, US PATENT NUMBER 6,289,353. CAID et al, US PATENT NUMBER 5,794,178.

Any response to this action should be mailed to:

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Any response to this action may be sent via facsimile to either:

(703) 872-9314 (for formal communications marked EXPEDITED PROCEDURE), or

(703) 746-5731 (for informal communications marked PROPOSED or DRAFT).

Hand delivered responses may be brought to:  
Sixth floor Receptionist  
Crystal Park II  
2121 Crystal Drive  
Arlington, Virginia.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Blackman who may be reached via telephone at (703) 305-0883. The examiner can normally be reached Monday through Friday between 8:30 A.M. and 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Michael Razavi, may be reached at (703) 305-4713

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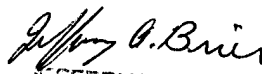
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Anthony J. Blackman

February 8, 2002

  
JEFFERY BRIER  
PRIMARY EXAMINER